

APPENDIX II TO PART 1068—EMISSION-RELATED PARAMETERS AND SPECIFICATIONS

This appendix specifies emission-related parameters and specifications that we refer to for describing such things as emission-related defects or requirements related to rebuilding engines.

I. Basic Engine Parameters for Reciprocating Engines.

1. Compression ratio.
2. Type of air aspiration (natural, Roots-blown, supercharged, turbocharged).
3. Valves (intake and exhaust).
 - a. Head diameter dimension.
 - b. Valve lifter or actuator type and valve lash dimension.
4. Camshaft timing.
 - a. Valve opening—intake exhaust (degrees from top-dead center or bottom-dead center).
 - b. Valve closing—intake exhaust (degrees from top-dead center or bottom-dead center).
 - c. Valve overlap (degrees).
5. Ports—two stroke engines (intake and/or exhaust).
 - a. Flow area.
 - b. Opening timing (degrees from top-dead center or bottom-dead center).
 - c. Closing timing (degrees from top-dead center or bottom-dead center).

II. Intake Air System.

1. Roots blower/supercharger/turbocharger calibration.
2. Charge air cooling.
 - a. Type (air-to-air; air-to-liquid).
 - b. Type of liquid cooling (engine coolant, dedicated cooling system).
 - c. Performance.
3. Temperature control system calibration.
4. Maximum allowable inlet air restriction.

III. Fuel System.

1. General.
 - a. Engine idle speed.
 - b. Engine idle mixture.
2. Carburetion.
 - a. Air-fuel flow calibration.
 - b. Idle mixture.
 - c. Transient enrichment system calibration.
 - d. Starting enrichment system calibration.
 - e. Altitude compensation system calibration.
 - f. Hot idle compensation system calibration.
3. Fuel injection for spark-ignition engines.
 - a. Control parameters and calibrations.
 - b. Idle mixture.
 - c. Fuel shutoff system calibration.
 - d. Starting enrichment system calibration.
 - e. Transient enrichment system calibration.
 - f. Air-fuel flow calibration.
 - g. Altitude compensation system calibration.
 - h. Operating pressure(s).

- i. Injector timing calibration.
4. Fuel injection for compression-ignition engines.
 - a. Control parameters and calibrations.
 - b. Transient enrichment system calibration.
 - c. Air-fuel flow calibration.
 - d. Altitude compensation system calibration.
 - e. Operating pressure(s).
 - f. Injector timing calibration.
- IV. Ignition System for Spark-ignition Engines.
 1. Control parameters and calibration.
 2. Initial timing setting.
 3. Dwell setting.
 4. Altitude compensation system calibration.
 5. Spark plug voltage.

- V. Engine Cooling System—thermostat calibration.
- VI. Exhaust System—maximum allowable back pressure.
- VII. System for Controlling Exhaust Emissions.
 1. Air injection system.
 - a. Control parameters and calibrations.
 - b. Pump flow rate.
 2. EGR system.
 - a. Control parameters and calibrations.
 - b. EGR valve flow calibration.
 3. Catalytic converter system.
 - a. Active surface area.
 - b. Volume of catalyst.
 - c. Conversion efficiency.
 4. Backpressure.

- VIII. System for Controlling Crankcase Emissions.
 1. Control parameters and calibrations.
 2. Valve calibrations.

- IX. Auxiliary Emission Control Devices (AECD).
 1. Control parameters and calibrations.
 2. Component calibration(s).
- X. System for Controlling Evaporative Emissions.
 1. Control parameters and calibrations.
 2. Fuel tank.
 - a. Volume.
 - b. Pressure and vacuum relief settings.

- XI. Warning Systems Related to Emission Controls.
 1. Control parameters and calibrations.
 2. Component calibrations.

APPENDIX III TO PART 1068—HIGH-ALTITUDE COUNTIES

1. Control parameters and calibrations.
2. Component calibration(s).

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 - b. Pressure and vacuum relief settings.

XI. Warning Systems Related to Emission Controls.

1. Control parameters and calibrations.
2. Component calibrations.

APPENDIX III TO PART 1068—HIGH-ALTITUDE COUNTIES

In some cases the standard-setting part includes requirements or other specifications that apply for high-altitude counties. The following counties have substantial populated areas above 4,000 feet above sea level and are therefore considered to be high-altitude counties:

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STATE OF ARIZONA

Apache
Cochise
Coconino
Navajo
Yavapai

STATE OF COLORADO

Adams
Alamosa
Arapahoe
Archuleta
Boulder
Chaffee
Cheyenne
Clear Creek
Conejos
Costilla
Crowley
Custer
Delta
Denver
Dolores
Douglas
Eagle
Elbert
El Paso
Fremont
Garfield
Gilpin
Grand
Gunnison
Hinsdale
Huerfano
Jackson
Jefferson
Kit Carson
Lake
La Plata
Larimer
Las Animas
Lincoln
Mesa
Mineral
Moffat
Montezuma
Montrose
Morgan
Otero
Ouray
Park
Pitkin
Pueblo
Rio Blanco
Rio Grande
Routt
Saguache
San Juan
San Miguel
Summit
Teller
Washington
Weld

STATE OF IDAHO

Bannock

Bear Lake
Bingham
Blaine
Bonneville
Butte
Camas
Caribou
Cassia
Clark
Custer
Franklin
Fremont
Jefferson
Lemhi
Madison
Minidoka
Oneida
Power
Teton
Valley

STATE OF MONTANA

Beaverhead
Deer Lodge
Gallatin
Jefferson
Judith Basin
Powell
Madison
Meagher
Park
Silver Bow
Wheatland

STATE OF NEBRASKA

Banner
Cheyenne
Kimball
Sioux

STATE OF NEVADA

Carson City
Douglas
Elko
Esmeralda
Eureka
Humboldt
Lander
Lincoln
Lyon
Mineral
Nye
Pershing
Storey
Washoe
White Pine

STATE OF NEW MEXICO

Bernalillo
Catron
Colfax
Curry
De Baca
Grant
Guadalupe
Harding

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Hidalgo
Lincoln
Los Alamos
Luna
McKinley
Mora
Otero
Rio Arriba
Roosevelt
Sandoval
San Juan
San Miguel
Santa Fe
Sierra
Socorro
Taos
Torrance
Union
Valencia

STATE OF OREGON

Harney
Lake
Klamath

STATE OF TEXAS

Jeff Davis
Judspeth
Parmer

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STATE OF UTAH

Beaver
Box Elder
Cache
Carbon
Daggett
Davis
Duchesne
Emery
Garfield
Grand
Iron
Juab
Kane
Millard
Morgan
Piute
Rich
Salt Lake
San Juan
Sanpete
Sevier
Summit
Tooele
Uintah
Utah
Wasatch
Wayne
Weber

Environmental Protection Agency

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STATE OF WYOMING

Albany
Campbell
Carbon
Converse
Fremont
Goshen
Hot Springs
Johnson
Laramie
Lincoln
Natrona
Niobrara
Park
Platte
Sublette
Sweetwater
Teton
Uinta
Washakie
Weston

PART 1074—PREEMPTION OF STATE STANDARDS AND PROCEDURES FOR WAIVER OF FEDERAL PREEMPTION FOR NONROAD ENGINES AND NONROAD VEHICLES

Subpart A—Applicability and General Provisions

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AUTHORITY: 42 U.S.C. 7401–7671q.

SOURCE: 73 FR 59379, Oct. 8, 2008, unless otherwise noted.

Subpart A—Applicability and General Provisions

§ 1074.1 Applicability.

The requirements of this part apply with respect to state and local standards and other requirements relating to the control of emissions from nonroad engines and nonroad vehicles.

§ 1074.5 Definitions.

The definitions in this section apply to this part. As used in this part, all undefined terms have the meaning the Act gives to them. The definitions follow:

Act means the Clean Air Act, as amended, 42 U.S.C. 7401–7671q.

Administrator means the Administrator of the Environmental Protection Agency and any authorized representatives.

Commercial means an activity engaged in as a vocation.

Construction equipment or vehicle means any internal combustion engine-powered machine primarily used in construction and located on commercial construction sites.

Engine used in a locomotive means either an engine placed in a locomotive to move other equipment, freight, or passenger traffic, or an engine mounted on a locomotive to provide auxiliary power.

Farm equipment or vehicle means any internal combustion engine-powered machine primarily used in the commercial production and/or commercial harvesting of food, fiber, wood, or commercial organic products or for the processing of such products for further use on the farm.

Locomotive means a piece of equipment meeting the definition of locomotive in 40 CFR 1033.901 that is propelled by a nonroad engine.

New has the following meanings:

(1) For locomotives, new has the meaning given in 40 CFR 1033.901.

(2) For engines used in locomotives, new means an engine incorporated in (or intended to be incorporated in) in a new locomotive.

(3) For other nonroad engines and equipment, new means a domestic or imported nonroad engine or nonroad vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser. Where the equitable or legal title to an engine or vehicle is not transferred to an ultimate purchaser until after the engine or vehicle is placed into service, then the engine or vehicle will no longer be new once it is placed into service. A nonroad engine or vehicle is placed into service when it is used for its functional purposes. This paragraph (3)